

Madeleine Strum|U.S. Environmental Protection Agency|109 TW Alexander Drive, RTP, NC 27711

Office of Air Quality Planning and Standards|Air Quality Assessment Division|Emission Inventory and Analysis Group|919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Gilbert, Alexas
Sent: Tuesday, August 30, 2016 9:54 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Beeler, Cindy <Beeler.Cindy@epa.gov>; Zull, Aaron <zull.aaron@epa.gov>
Cc: Matichuk, Rebecca <Matichuk.Rebecca@epa.gov>; Kosusko, Mike <kosusko.mike@epa.gov>
Subject: RE: oil tank composite

Madeleine –

Alexas and Cindy here:

We looked at the Uinta Basin EI submittal by Bill Barrett. They provided 5 “production area” speciated mol% profiles for tank emissions. We noticed that the speciation of flash emissions was roughly the same as the speciation for standing/working/breathing emissions but provide both below where available.

The 5 production area benzene mol% Flash/S-W-B looked like this:

- #1 - 1.9129/ -
- #2 – 1.1756/1.1766
- #3 – 3.4247/ -
- #4 – 1.0340/1.0349
- #5 – - /0.2565

We're not sure how to convert the mol to mass % to compare to the Garrett 8/10/15 mass% speciation profiles provided.

Cindy & Alexas.

From: Strum, Madeleine

Sent: Monday, August 29, 2016 9:36 PM

To: Beeler, Cindy <Beeler.Cindy@epa.gov>; Gilbert, Alexas <Gilbert.Alexas@epa.gov>; Zull, Aaron <zull.aaron@epa.gov>

Cc: Matichuk, Rebecca <Matichuk.Rebecca@epa.gov>; Kosusko, Mike <kosusko.mike@epa.gov>

Subject: RE: oil tank composite

Hi All,

Any findings on this?

Madeleine

From: Beeler, Cindy

Sent: Friday, August 26, 2016 11:03 AM

To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Gilbert, Alexas

<Gilbert.Alexas@epa.gov>; Zull, Aaron <zull.aaron@epa.gov>
Cc: Matichuk, Rebecca <Matichuk.Rebecca@epa.gov>
Subject: Re: oil tank composite

Alexas - Did Bill Barrett provide a speciated tank emission profile as part of the UB EI?

Ex. 5 - Deliberative Process

I'm cc'ing **Aaron** on this email too because he is part of the data analysis team.

Cindy Beeler

US EPA Region 8, Energy Advisor

Office of the Regional Administrator

Tel: 303-312-6204

Beeler.Cindy@epa.gov

From: Strum, Madeleine
Sent: Thursday, August 25, 2016 9:50:46 PM
To: Beeler, Cindy; Gilbert, Alexas
Cc: Matichuk, Rebecca
Subject: oil tank composite

All

The corrected Uinta Basin oil tank profiles have a very high benzene due to the profile from "Oil Field - Oil Tank Battery Vent Gas - Bill Barrett Corporation" which is 10 times more benzene than the other 2 operators (see attachment, rows 40, 41 and 42)

I've not seen that high benzene from other oil tank profiles (East Texas or Uinta WRAP). Did you have any newer data that can shed light on whether the composite is reliable to use in our modeling or should we use the WRAP for this category (oil tanks)

Composite Profile 95419 Oil Tanks ERRONEOUS versus CORRECTED

SPECIES_PROPERTIES.NAME	ERRONEIOUS wt fraction TOG	ERRONEIOUS wt fraction	SPECIES_PROPERTIES.NAME	CORRECTED tog fraction	CORRECTED voc fraction
		voc fraction			
2,2,4-trimethylpentane	0.006049235	0.006067231	2,2,4-trimethylpentane	0.00607407	0.00881391
Benzene	0.006996714	0.007017530	Benzene	0.01507368	0.02187298
Ethylbenzene	0.002248985	0.002255676	Ethylbenzene	0.00052494	0.00076173
Isomers of xylene	0.014199917	0.014242162	Isomers of xylene	0.00360276	0.00522787
Methane	0.001914960	0.001920657	Methane	0.21979532	0.31893862
N-hexane	0.038761588	0.038876904	N-hexane	0.08221988	0.11930689
Toluene	0.014270297	0.014312751	Toluene	0.01035843	0.01503081

Thanks

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